BAITLE FOR NORMANION



STRATEGIC SIMULATIONS INC.

LIMITED WARRANTY

Strategic Simulations, Inc. ("SSI") warrants that the diskette on which the enclosed program is recorded will be free from defects in materials and workmanship for a period of 30 days from the date of purchase. If within 30 days of purchase the diskette proves defective in any way, you may return it to Strategic Simulations, Inc., 465 Fairchild Drive, Suite 108, Mountain View, CA 94043 and SSI will replace it free of charge. In addition, if the diskette proves defective at any time after the first 30 days, return the diskette to SSI and SSI will replace it for a charge of \$10.00. Please allow about four weeks for delivery.

SSI MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE PROGRAM RECORDED ON THE DISKETTE OR THE GAME DESCRIBED IN THIS RULE BOOK, THEIR QUALITY, PERFORMANCE, MERCHANT-ABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THE PROGRAM AND GAME ARE SOLD "AS IS." THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE IS WITH THE BUYER. IN NO EVENT WILL SSI BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE PROGRAM OR GAME EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

The enclosed software program and this Rule Book are copyrighted. All rights are reserved. This Rule Book may not be copied, photographed, reproduced, or translated or reduced to any electrical medium or machine-readable form, in whole or in part, without prior written consent from SSI. The program accompanying this Rule Book may be copied, by the original purchaser only, as necessary for use on the computer for which it was purchased.

© 1981 by Strategic Simulations, Inc. All Rights Reserved.

TABLE OF CONTENTS

OVERLORD BRIEFING	1
OVERVIEW	
ALLIED FORCES	1
ENEMY FORCES	
LOGISTICS	
AMPHIBIOUS ASSAULT	
AIR AND NAVAL SUPPORT	
COMBAT	
SUMMARY OF GAME PLAY	2
I. Scenario Selection	2
II. Airborne Drops	3
III. Supply Allocation	3
IV. Air Interdiction	3
V. Movement	3
VI. Combat	3
CHARTS	4
TRANSPORT AVAILABILITY	4
WEATHER FORCECAST % PROBABILITY	4
AMPHIBIOUS SUPPLY EXPENDITURE	
COMBAT SUPPLY EXPENDITURE	
FUEL EXPENDITURE	4
GENERAL SUPPLY EXPENDITURE	
AIR NAVAL BOMBARDMENT LOSSES	4
INFILTRATION	
COMBAT RESULTS RESOLUTION	
VICTORY POINTS	
STRATEGY LEVEL DESCRIPTIONS	
VICTORY CONDITIONS	
SUGGESTED TRANSPORT ALLOCATION	5
TERRAIN EFFECTS	6
INTERDICITON EFFECTS	
DIFFICULTY LEVELS	
OPTIONAL RULES	6
HISTORICAL ANALYSIS	7
CREDITS	7

OVERLORD BRIEFING

A dispatch reaches your headquarters in London, England. You tear it open and find a file labeled, "OPERATION OVER-LORD", with a message attached:

YOU ARE HEARBY PLACED IN COMMAND OF THE EXECUTION OF OPERATION OVERLORD. ATTACHED IS A BRIEFING PREPARED BY THE PLANNING STAFF OF THIS TOP SECRET OPERATION DESIGNED TO BREACH THE AXIS BEACH FORTIFICATIONS ALONG THE NORMANDY COASTLINE. THIS OPERATION IS CRUCIAL TO THE ALLIED CAUSE. ITS SUCCESS IS IN YOUR HANDS.

- ALLIED COMMAND HEADQUARTERS

OVERVIEW

As you now know, Commander, the code name of this operation is "OVERLORD". Your forces will be landing on the beaches of France along the Normandy peninsula between the towns of Cherbourg and Caen. Five locations have been designated as beachheads. They have been named Utah, Omaha, Gold, Juno, and Sword beaches. Please refer to the enclosed operations map for the exact locations of these beachheads.

You have the largest armada of war and transport ships ever to be assembled in history. These vessels will provide you with naval bombardment and transport capability to land combat troops and supplies. You are in command of 33 American and British combat formations. Depending on the weather, you should be able to land 12-15 of these formations on D-Day.

The numerous fighter and bomber aircraft available to you will provide excellent ground support and serve to slow down the movement of enemy combat formations.

The logistics problem of supporting this massive crosschannel assault is considerable. We have been preparing for this day for many months and have laid plans in fine detail. Weather is a very limiting factor on our careful planning to provide you with maximum transport. We will need from you, Commander, your desired priorities of the four transport categories: amphibious (landing units), combat supply, general supply (unit maintenance), and fuel.

France has been under the yoke of German occupation since May 1940. Your objective is to establish a firm foothold and supply base from which France and Western Europe can be liberated. To accomplish this you must:

- Take and occupy the port of Cherbourg as quickly as possible.
- 2. Occupy the town of Caen and its immediate vicinity.
- 3. Occupy the important road net of St. Lo.
- 4. Penetrate as deeply as possible into the continent.
- 5. Destroy and disrupt enemy formations.

Territorial objectives will only be considered as met if occupied by units in supply.

You have until 1200 hours on June 30th to complete your objectives. At that time your position on the continent will be evaluated. (See Victory Conditions chart).

ALLIED FORCES

As mentioned, Commander, you have at your disposal 33 combat formations as listed below (see the attached order of battle for more detail):

		American	Commonwealth
3	airborne divisions	2	1
15	infantry divisions	9	6
4	armored divisions	2	2
4	armored brigades	0	4
4	armored cavalry regiments	4	0
1	ranger battalion	1	0
2	commando brigades	0	2
		18	15

Rritich

Your combat formations have abilities which they all have in common and some which only a few possess. All formations have their performance modified by the unit's leadership and fatigue level. To assist you in evaluating a unit, an effectiveness rating is also available (The effectiveness rating in « » multiplied by the combat strength gives you the modified strength of a unit). Leadership varies from unit to unit, but is generally good. A formation gains fatigue while moving and performing combat. Fighting less intensely or not fighting at all or being relieved to rest behind the lines reduces fatigue.

We are geared to provide considerable replacements to the combat formations. Resting behind the lines allows more replacements to enter the unit.

Units advanced beyond supply lines and units deprived of general supply will lose strength and gain fatigue rapidly. Infiltration (moving past or along the positions of enemy formations) is not possible for almost all of the units under your command. The four armored divisions, however, we are confident will be able to infiltrate almost all of the time. The armored divisions and armored brigades and cavalry regiments consume fuel at a rate of 50% more than other units.

Your three airborne units will be dropped behind the enemy beaches at your discretion. We do warn you, however, that the units may drift from their designated drop zones.

The ranger and commandos have increased strength attacking the beaches and have more latitude in where they are able to land on the coastline.

ENEMY FORCES

Intelligence reports that the Germans have seven divisions in the immediate area of your invasion. Overall, the Germans have some 60 divisions on the Western Front with 11 of these being panzer. By pulling off some deceptive maneuvers, we hope to pin down the majority of the German forces along other coastal areas in anticipation of another amphibious invasion. Also, due to our bombing of the transportation system of France and of moving German formations, we expect to slow the arrival of reinforcements into the Normandy area.

You can expect, Commander, that the leadership of individual enemy formations will be better than ours. We also predict that their ability to infiltrate is superior to ours. For that reason we recommend that you assign as many aircraft as is feasible in the area of operations on interdiction missions which will slow the movement of enemy formations.

Intelligence reports that German manpower reserves will allow limited replacements for combat units. We predict that replacements will be put into units which have lost a third or more of their original strength.

Rommel is in command of the forces opposing you. Intelligence reports that his hands are tied to directives of higher German command. We hope to fool the German High Command, but Rommel is another matter. If he has any chance at all, he will nush you back into the sea.

LOGISTICS

The success or failure of your invasion may very well hinge upon the proper allocation and use of supply. Ship transport is the only way to move units and supply onto the beaches. Allocation of transport is divided into four categories:

- 1. Amphibious (unit transport)
- 2. Combat Supply
- 3. General Supply (unit maintenance)
- 4. Fuel

You must give us your shipping priorities 2 days in advance. See the attached chart for suggested transport allocations. The number of transports available will vary considerably according to the weather. See the charts attached for transport availability and weather.

Units transported across will also bring with them a certain amount of the three types of supply which will be added to the overall supply pools. Every two days, units require a portion of the general supply available for maintenance. Units consume fuel when they move and combat supply when they fight (see attached charts for estimated amounts).

Supply lines are extended from the beaches by depot units which trace their supply to the beachhead markers. Beachhead markers are very vulnerable to enemy assault. If destroyed, that beach assault area will be closed to amphibious transport. In addition, overall supply availability will be reduced. By all means, Commander, protect your beachheads! Units deprived of general supply or units beyond the established supply lines will suffer strength loss and fatigue. (Units must be within three map positions of a depot or beachhead marker to be within supply lines). A chain of depots three hexes apart may be formed to extend supplies as long as at least one of the depots is within three hexes of a beachhead marker.

American units may only draw supply from U.S. depot units or Utah or Omaha beach. British Commonwealth units may draw supply from the remaining beaches or their depot units.

AMPHIBIOUS ASSAULT

Each assault beach will have a beachmarker to aid your units to land at the correct locations. The markers are essential for landing supplies and units. A destroyed marker results in that assault area being closed off to future landings.

Combat units will attack the German coastal defense units until they clear an area large enough for them to move through. We estimate, Commander, that it will take 1 or 2 divisions to clear out the coastal defense units within each assault area.

Time is of the essence. Your assaulting formations must land and quickly overcome the German defenses. You must advance onto the continent and establish your position before the enemy can react. Air support and naval bombardment will aid you in accomplishing this.

Pay careful attention to the amount of transport allocated to

amphibious landing. You'll need to support your advance with reinforcing units at appropriate times.

AIR AND NAVAL SUPPORT

The air and naval forces under your command are the most massive in number ever brought together. At your command these forces will add their support to your combat units to reduce opposing enemy units. Take note of the naval range shown on the operation's map. Also, see the attached chart which gives estimated losses inflicted according to the amount of bombardment.

You may also allocate aircraft to fly interdiction missions. We recommend that you allocate the maximum possible since this significantly reduces German movement. Poor weather will affect the effectiveness of the interdiction missions (see interdiction table).

Our planners agree that properly placed naval and air bombardment will allow your combat formations to push past even the toughest enemy stronghold. We therefore recommend that you allocate maximum support to those key positions whose downfall will allow significant advances by your combat units.

COMBAT

In order to achieve the objectives you must make heavy assaults toward key enemy positions. Extreme use of air/naval bombardment will be necessary to reduce the enemy. Use of armor divisions to infiltrate the enemy line and cut retreat routes will speed the advance. Attacks by as many units as possible along different approaches will force the German unit to thin his position which may lead to a breakthrough. Heavy assaults should be made whenever you can achieve at

least 2.5 to 1 odds over the enemy, otherwise, heavy losses may result. If an enemy unit can be eliminated or forced to adopt a retreat strategy while you engage in breakthrough or blitzkrieg strategies, you will be able to advance and attack again.

Fatigue and leadership affect a unit's combat capabilities. If the fatigue is at a high level and leadership is low, then the unit's effective strength is reduced and its ability to perform at the more intense strategies will be curtailed. Therefore, units with high fatigue will have to be relieved to rest behind the lines for a few days.

The lack of combat supply will prevent your combat formations from launching assaults. Defending without combat supply will greatly reduce your strength.

Study carefully, Commander, the terrain your units will be fighting in. Attacking the enemy from a river position will reduce your effective strength. Towns, swamps and especially the bocage terrain will provide excellent cover for the defending German units (see the Terrain Effects Chart).

Also, take note of the fuel remaining in the supply pool. The lack of fuel will stop your advances into areas that cost dearly in assault.

SUMMARY OF GAME PLAY

I. Scenario Selection

You will be required to answer a series of questions regarding the game you wish to play. If you answer no to the question which asks if you wish to change any ratings or players, the scenario will be set to the Campaign Game, the computer will play the side of the German, all ratings will be set to historical, the display time delay will be set to 3 seconds, and

the Germans will not be allowed to move on D-Day. If you answer yes, then you will choose the players (computer as German or human as German — there is no computer as Allied); set the ratings for combat points, leadership, transport, airpower, naval power, coastal defense, and German reinforcement arrival; decide if the German will be allowed

to move on D-Day; and select the time delay for the displays (when you become familiar with the game you should choose a time delay of "1" to speed up play).

II. Airborne Drops

After you have answered the questions concerning the scenario you will be asked to drop your three parachute divisions. The map will indicate a possible drop zone for the 82nd airborne. If you input "Y" for yes then the unit will attempt to land there (it may drift). If you input "N" for no then a series of possible landing sites will be indicated to you as you continue to answer no. This will recycle until you input a yes answer. You will land the 101st and 6th airborne following the same process.

III. Supply Allocation

Next you will be required to give your priorities for the four types of transport across the channel: fuel, general, combat, and amphibious. You will be required to input two digits, 00 to 99, for each. The digits represent the percentage of the total transport capacity available that will go towards that category of transport. The digits that you input in the four transport categories must add up to 100. Any sum more or less than that will result in a repeat of the allocation input. Please note that this allocation is for the following turn and not the current turn.

IV. Air Interdiction

You must now input the number of air points which you wish to expend for interdiction. This must be inputed as two digits from 00 to 99. Note that this phase is skipped the first turn for the Allies, if the German does not move on D-Day. (See attached charts for effects on German movement).

V. Movement

A unit which is eligible to move will flash on the map while its name and statistics are displayed below. The Atari and Apple versions require you to use a movement cursor. See the appropriate Atari or Apple card. If you wish to skip this unit for now, press "F". If you wish to end your entire movement phase press "E". To move the unit press keys "1-6" which will move the unit in the direction indicated (see compass).

6 2



When finished moving the unit for now, press "F". You may also press "E" to end the movement phase completely. The program will allow you to cycle through your units 5 times and then will automatically end the movement phase. You will be allowed to return to moving units which previously "F" keyed their movement if eligible for further movement. See the attached card of your computer version for an explanation of the unit and movement display.

A unit whose location is in the ocean is waiting to be transported across the channel at your convenience. To land such a unit move it using keys "1-6" until you have it placed over a beachhead marker. When you do, press "1-6" in the direction of the beach location where you wish to land. Ranger and commando units have the option of being placed on or adjacent to a beachhead marker before indicating their landing. If the assault area has been cleared of German coastal defense (100 or more combat points have previously landed at this beach) then the unit will move on to the indicated beach position and may continue its movement. If not cleared, then the unit will be required to attack the German unit again and again until one or the

other is eliminated (see combat). When the German unit is eliminated then the unit will land and may continue its movement. Note that the quicker you eliminate the German unit the more movement you will be allowed after landing. Be sure to land U.S. units at Utah and Omaha beaches and the British Commonwealth at Gold, Juno, or Sword. They will be unsupplied (not within supply lines) if you don't. Each unit is given a movement allowance. Points are subtracted from this each time you enter a new position (see the Terrain Effects Chart for more details). Your movement will automatically end when you move next to an enemy unit. Infiltration is defined as being next to an enemy unit and moving directly to a position next to an enemy unit. Infiltration is not always possible (see infiltration chart). The U.S. and British forces have depot units which are used to establish supply lines from the beachhead markers to combat units on the continent. A unit is in supply if it is within three positions of a beachhead marker or a depot which is in supply (in supply is defined as being 3 or less positions from another depot which itself is in supply or within three positions of beachmarker). Supply for the entire turn is determined at the beginning of each turn starting with June 8th during the logistics phase.

VI. Combat

Enemy units eligible to be attacked by your units will be flashed one by one on the map. If you wish to attack a unit press "Y" (Apple users should refer to the Apple data card for differences in the way combat is handled on the Apple). When you do, eligible attacking units will flash one by one. You may include them in the attack by pressing "Y". You will be required to input naval and air support. Offensive bombardment causes additional enemy losses while defensive bombardment causes less friendly losses than expected. You now will input your attack or defense levels. The combat results will be displayed (see charts for display explanations, level descriptions, and combat results).

The defending unit may be required to retreat. If you desire to retreat press keys "1-6" to indicate the direction. Press "F" if you refuse to retreat. Refusing the retreat or retreating next to an enemy unit will result in more casualties. If the defender retreats, an attacking unit may advance into its vacated postion. Press "F" if the indicated attacking unit is not desired to advance or press keys "1-6" to indicate the advance directions. An enemy unit eliminated or one which chose defense levels 1 or 2 while the attacking chose attack levels 8 or 9 will result in a situation where the attacking units will be eligible to attack again. Eliminated German units immediately form into cadre units which will retreat one map position, unless they were eliminated due to retreating next to an enemy unit (or refusing to retreat).

The program will cycle through eligible defending units twice and then automatically end the combat phase. You may end the combat phase during unit selection by pressing "E".

CHARTS

TRANSPORT AVAILABILITY

Turn		Weather		
	Clear	Cloudy	Overcast	Storm
D-Day	712-764	641-687	N/A	N/A
6/6	1460-1566	1314-1410	1180-1268	419-478
6/8	1561-1674	1404-1507	1261-1355	448-511
6/10	1668-1789	1501-1610	1348-1448	479-546
6/12	1784-1914	1606-1723	1442-1549	512-585
6/14	1911-2050	1720-1845	1544-1660	549-626
6/16	2051-2200	1846-1980	1657-1781	589-672
6/18	2100-2253	1890-2028	1697-1824	603-688
6/20	2152-2308	1936-2078	1739-1868	618-705
6/22	2205-2365	1984-2129	1782-1915	633-723
6/24	2261-2425	2034-2183	1827-1963	649-741
6/26	2319-2487	2086-2239	1874-2013	666-760
6/28	2379-2552	2141-2297	1923-2066	683-780

Note: When pitted against another human as the German the above points are increased by 8%. Also the Air and Naval points are increased by 40%.

WEATHER FORECAST — Percent Probability

Turn	Clear	Cloudy	Overcast	Storm
D-Day	52%	48%	0%	0%
6/6	51%	35%	12%	2%
6/8	51%	35%	12%	2%
6/10	51%	35%	12%	2%
6/12	51%	35%	12%	2%
6/14	51%	35%	12%	2%
6/16	51%	35%	12%	2%
6/18	36%	21%	10%	33%
6/20	36%	21%	10%	33%
6/22	36%	21%	10%	33%
6/24	51%	35%	12%	2%
6/26	51%	35%	12%	2%
6/28	51%	35%	12%	2%

NOTE: At the end of each turn you will see a percentage displayed in regards to weather. This is a percentage of the average weather for the entire game at that point. For example a percentage of -11% means that you are having 11% less than average weather for the entire game up to this point.

FUEL EXPENDITURE

Infantry, airborne, commando, and ranger units expend 10 fuel points per movement point. All other units expend 15 fuel points per movement point. These costs are based on a unit having 100 combat points. A unit having less than 100 CP will expend proportionately less fuel points when moving.

GENERAL SUPPLY EXPENDITURE

A unit on the map at the beginning of its movement will expend one half of its Combat Strength in general supply points if within an enemy ZOC. If not it will expend ¼ of its combat strength in general supply.

AMPHIBIOUS SUPPLY EXPENDITURE

When a unit lands it expends amphibious supply points equal to its combat strength.

COMBAT SUPPLY EXPENDITURE

			Attack Strategy							
		1	2	3	4	5	6	7	8	9
	1	3	6	8	11	13	16	18	21	23
a b	2	6	11	16	21	26	31	36	41	46
25 99.	3	8	16	23	31	38	46	53	61	68.
E S	4	11	21	31	41	51	61	71	81	91
Defens Strateg	5	13	26	38	51	63	76	88	101	113
Defer Strate	6	16	31	46	61	76	91	106	121	136
•	7	18	36	53	71	88	106	123	141	158
	8	21	41	61	81	101	121	141	161	181
	9	23	46	68	91	113	136	158	181	203

NOTE: Table is based on Allied units attacking/defending with 100 CP overall. Less (or more) than that will result in proportionate costs.

AIR/NAVAL BOMBARDMENT LOSSES

Air/Naval Points Allocated	Additional Losses Inflicted on German Defender	Reduced Losses on Allied Defender
0-7	0 additional losses	0 less losses
8-29	0-1	0
30-52	1-2	0-1
53-74	1-3	0-2
75-96	2-4	1-2
97-119	2-5	1-3
120-142	3-6	2-4
143-164	3-7	2-4
165-187	4-8	2-5
188-198	4-9	2-6

INFILTRATION

Moving next to an enemy unit costs 4 additional movement points and the ending of the movement phase for that unit. Infiltration, or the movement from a position next to an enemy unit to a position also next to an enemy unit, costs 8 additional movement points and the ending of the movement phase for that unit. Not all units can infiltrate or infiltrate with the same degree of success.

			Mech.	Infantry
Allied _	90%	Human-German	70%	40%
Armored	chance	Computer-German	80%	70%

COMBAT RESULTS RESOLUTION

Strategies		0	dds			
Att Dof	1-2	1-1	2-1	3-1	4-1	5-1
Att. Def.						
9 vs 1	15/8	12/10	11/11	11/11	10/12	9/13
8 vs 2	13/7	11/9	10/10	10/10	9/11	8/12
7 vs 3	12/7	10/8	10/9	9/10	8/10	8/11
6 vs 4	12/7	10/8	9/8	8/9	8/10	7/11
5 vs 5	12/6	10/8	9/8	8/9	8/10	7/10
4 vs 6	12/7	10/8	9/8	8/9	8/10	7/11
3 vs 7	12/7	10/8	10/9	9/10	8/10	8/11
2 vs 8	13/7	11/9	10/10	10/10	9/11	8/12
1 vs 9	15/8	12/10	11/11	11/11	10/12	9/13

Att./Def. Losses

Notes:

- Obviously the above chart does not give all possible combinations of strategies and odds. It's provided to give you an idea of what you can expect.
- 2. For every attacking unit greater than one add 10% to the defender's losses.
- 3. A random loss of up to 3 is added to both the attacker and defender separately.
- 4. No movement or combat is permitted on the last turn of each scenario.

STRATEGY LEVEL DESCRIPTIONS

Defense

- 1 Full retreat (automatic retreat) (possible trigger of second combat)
- 2 Delaying action (automatic retreat) (possible trigger of second combat)
- 3- Fighting withdrawal (automatic retreat)
- 4 Hold positions
- 5 Standfast
- 6 Hold at all costs
- 7 Limited counterattack
- 8 Counterattack
- 9 Heavy counterattack

Attack

- 1 Recon
- 2 Probe
- 3 Light attack
- 4 Limited attack
- $5-Medium \ attack$
- 6 Heavy attack
- 7 Major attack
- $8-Breakthrough\,attack (possible\,trigger\,of\,second\,combat)$
- 9 Blitzkrieg attack (possible trigger of second combat)

Note: An attacker will be allowed to attack again if:

1) the enemy is eliminated

or 2) an "8" or "9" attack strategy was chosen and a "1" or "2" defense strategy was chosen.

VICTORY POINTS

	Allied	German
Cherbourg	10 per turn.150 on June 30 (per hex) (no points awarded if German unit is adjacent to occupy- ing Allied unit)	0
Caen and St. Lo	5 per turn.75 on June 30 (per hex) (no points awarded if German unit is adjacent to occup- ing Allied unit)	0
Ocean side of Naval range excluding area east of Caen (see map) (side nearest Great Britain)	0	2 per unit on June 8 One more additional point per unit each turn thereafter. (ie., June 14 5 pts per German unit)
Continent side of Naval range (side nearest French interior) per unit per turn	Per formula: CP of Allied unit/6 times horizontal line of map position of unit (0-11 where 0 = above Cherbourg and 11 = southern edge of map) (on Apple, Cherbourg is on line 0)	0
Eliminated Units	,	20/Allied unit
Casualties	1/German casualty point	1/Allied casualty point
Casualties per out of general supply	Ö	½/Allied casualty point

VICTORY CONDITIONS

Campaign Game First Two Week Scenario

Score	Level of Victory	Score
1300 or more	Allied Strategic	390 or more
800 to 1299	Allied Operational	240 to 389
600 to 799	Allied Marginal	180 to 239
250 to 599	German Marginal	75 to 179
0 to 249	German Operational	0 to 74
less than 0	German Strategic	less than 0

SUGGESTED TRANSPORT ALLOCATION

Turn

Allocated for	Fuel	General	Combat	Amphibious
6/6	35	23	27	15
6/8	35	30	25	10
6/10	30	30	3	10
6/12	25	30	5	10

Note: You allocate supply one turn it wance. Allocation after 6/12 will be dependent on your needs and situation. Prepare with stockpiling general supply for the turns with good chance of storm weather.

INTERDICTION EFFECTS

Air Points Allocated	Decrease in German Movement Points Per Unit
0	0
1-3	0-1
4-15	0-2
16-35	0-3
36-63	0-4
64-99	0-5

Note: Interdiction effects are modified by weather. Cloudy weather reduces inputed air points by 20%, overcast by 40%, and interdiction not possible during storm weather

Difficulty Levels

The ratings provided in the program allow you, as player, to adjust several factors of the game. What the designers feel to be historical is a rating of "5" for all factors (except German leadership which is 7) and no German movement on D-Day. Feel free to deviate from these ratings. Players should follow the schedule below as it pertains to their skill level.

nedule below a	s it pertains to their skill lev	ei.	
Novice:	ee: German Leadership Amphibious Supply Rating		
	Tactical Air Power Rating	: 6	
	Coastal Defense Rating	: 3	
	Naval Power Rating	: 6	
	All Others	: 5	
	No German Movement		
	on D-Day		
Experienced:	German Leadership	: 7	
•	Amphibious Supply Rating	: 6	
	Tactical Air Power Rating	: 6	
	All Others	: 5	
	No German Movement		
	on D-Day		
Expert:	No Changes To Ratings		
•	(You may want to set the		
	delay loop to 1)		
	No German Movement		
	on D-Day		

Optional Rules

Rommel's Plan: Rommel was restrained by the German higher command. Had he been given more authority, he would have implemented his plan in full which was to crush the invasion at the beaches.

Coastal Defenses : 8
Reinforcements : 3
No German Movement
on D-Day

Patton replaces Montgomery: Although, politically, a poor example, George Patton was a driven and ambitious military commander.

Amphibious Supply : 6 Leadership (US) : 7

Weather score adjustment: If you feel that weather has cheated you or has been overly kind to you adjust your score by using the formula below.

Adjusted Score = Score – (Score \times Weather %)

EXAMPLE 1: Score = 800 Weather = 11%

Ajusted Score = $800 - (800 \times .11) = 712$

EXAMPLE 2: Score = 600 Weather = -4%

Adjusted Score = $600 - (600 \times -.04) = 624$

TERRAIN EFFECTS

Terrain Type	Movement Point Cost	Defense Modifier	Attack Modifier
Clear	1	1	1
Town	1	2	1
Bocage	3	2.5	1
Swamp	4	2	.75
River	2	1	.5
Beach	2	1	1
Ocean	0	1	.5

Note: There is a 30% chance that one movement point cost will be added to the above (except ocean). Rangers and commandos are not halved when attacking from ocean. Moving next to an enemy unit costs 4 additional movement points. Moving directly from a position next to an enemy unit to a position next to an enemy unit costs 8 additional movement points.

HISTORICAL ANALYSIS

Operation Overlord, the codename for the amphibious invasion of the Normandy beaches in France, was initially scheduled for June 5,1944. However, due to extremely poor weather conditions the planned invasion was set for June 6. Since 1940 the Germans had constructed a fortified wall of defenses all along the coastline. Against minefields, barbed wire, underwater obstacles, and flooded inland areas, the Allies stormed the beaches during the early morning hours of June 6. Prior to the amphibious assault three airborne divisions landed behind the beaches. The U.S. 82nd and 101st Airborne Divisions landed around St. Mere-Eglise while the British 6th Airborne parachuted northeast of Caen securing valuable bridge sites.

On Utah beach the 4th Infantry Division moved 3-5 miles inland during the first day. The two airborne divisions had effectively put up a screen to prevent German reinforcements from interfering with the build up on the beaches. Omaha beach encountered withering fire from the veteran 352nd Infantry Division. The first 24 hours resulted in a beachhead expanded less than a mile. Three British and Canadian infantry divisions supported by three armored brigades and two commando brigades assaulted Gold, Juno, and Sword beaches. Under intense fire they rapidly pushed forward over eight miles the first day suffering heavy casualties. By 2400 hours on D-Day none of the beachheads had yet attained their objectives. Omaha beach was the only one which had not yet secured a firm beachhead.

By June 10th all the beachheads were linked up. In the Utah beach area the 4th and 9th Infantry Divisions held the north and northwest flanks near Quineville and Montebourg. The west and south flanks were secured by the 101st and 82nd Airborne Divisions. The south flank from Carentan to a few miles south of Isigny was held by the 2nd and 3rd Armored Divisions. The 1st, 2nd, and 29th Infantry Divisions held the line from south of Isigny to Trevieres to Bayeux. From Bayeux towards Caen and then to Ouistreham stood

the 50th Br. Infantry, 7th Br. Armored, 3rd Can. Infantry, 51st Br. Infantry, 3rd Br. Infantry, 6th Br. Airborne, and numerous brigades.

The next phase in Operation Overlord was to sever the Cherbourg peninsula from Carentan to Carteret and then attack Cherbourg, a large port which was badly needed in order to increase the amount of men, material, and supplies being landed on the continent. By June 17th the 82nd Airborne and the 9th Infantry Divisions had punctured a 2-3 mile hold across the peninsula cutting off the German units in the north. On June 21st the 4th, 9th, and 79th Infantry Divisions finally reached Cherbourg and began assaulting the outer defenses of the fortified port. Cherbourg fell on June 27th but not before the Germans had completely destroyed all of the port's facilities.

By the end of June the Allies were far from their orignal objectives. Although Cherbourg had been captured, the U.S. line only ran from Carteret to Carentan to two miles north of St. Lo to Caumont. The British line was from Caumont to Tilly to Caen to Troarn to Ouistreham. The Germans still managed to hang onto Caen, which was surrounded on the east, north, and west by Allied units. The Americans had not yet captured La Haye-du-Puits, Lessay, Periers. and St. Lo.

The advance had been slower than anticipated due to the easily defended bocage country which required the attacker to develop special tactics and equipment to move through the hedgerows, the necessity of capturing Cherbourg which drew off a full three divisions, and the storm on the night of June 19th which greatly damaged the artificial Mulberry harbors. Bradley had only three days of ammo left while Montgomery was three divisions behind in his buildup.

On July 25th Operation Cobra was launched in the American sector near St. Lo. The Allied army finally managed to breakout of the Normandy bocage country and with the U.S. Third Army's famous General George S. Patton in command of the breakthrough forces, the Allies began to pursue the German forces across France.

CREDITS

Game Design/Rules — David Landrey
Game Development — Charles Kroegel, Jr.
Apple & TRS-80 Versions — David Landrey
Atari Version — Dale Disharoon
Art & Graphic Design — Louis Saekow, Kevin Heney
and Don Woo

Typesetting — Abra Type Printing — A&a Printers and Lithographers Customized Disc Operating System — Roland Gustafsson

TERRAIN EFFECTS

Terrain Type	Movement Point Cost	Defense Modifier	Attack Modifier
Clear	1	1	1
Town	1	2	1
Bocage	3	2.5	1
Swamp	4	2	.75
River	2	1	.5
Beach	2	1	1
Ocean	0	1	.5

Note: There is a 30% chance that one movement point cost will be added to the above (except ocean). Rangers and commandos are not halved when attacking from ocean. Moving next to an enemy unit costs 4 additional movement points. Moving directly from a position next to an enemy unit to a position next to an enemy unit costs 8 additional movement points.

WEATHER FORECAST — Percent Probability

Turn	Clear	Cloudy	Overcast	Storm
D-Day	52%	48%	0%	0%
6/6	51%	35%	12%	2%
6/8	51%	35%	12%	2%
6/10	51%	35%	12%	2%
6/12	51%	35%	12%	2%
6/14	51%	35%	12%	2%
6/16	51%	35%	12%	2%
6/18	36%	21%	10%	33%
6/20	36%	21%	10%	33%
6/22	36%	21%	10%	33%
6/24	51%	35%	12%	2%
6/26	51%	35%	12%	2%
6/28	51%	35%	12%	2%

NOTE: At the end of each turn you will see a percentage displayed in regards to weather. This is a percentage of the average weather for the entire game at that point. For example a percentage of -11% means that you are having 11% less than average weather for the entire game up to this point.

BAITLE FOR NORMANDY

PLAYER AID CARD — ATARI

LOADING AND SAVING A GAME

Loading: (the game requires the Atari BASIC cartridge)

Disk- New Game: Insert disk into disk drive. Turn on the disk drive and computer. The program

will automatically boot up.

Saved Game: When you choose this option you will be

asked to enter the file name of the saved game. You must first remove the game disk and replace it with the saved game disk. After you have entered the file

name replace it with the game disk.

Cassette- New Game: Insert the Atari version side of the

cassette into the recorder and rewind it. Turn on the computer, press the recorder play button, and type RUN "C . Press the RETURN key twice and wait for the program to load and execute. When you have finished answering the ques-

tions in the opening program keep the play button depressed on the recorder and the computer will load in the main program.

Saved Game: When you choose this option you will be required to place the saved game cassette into the recorder, press PLAY, and the RETURN key.

Saving a Game:

Disk: The computer will ask you to type in a file name under which the game will be saved (write it down for future reference). The name may contain up to eight characters and must begin with a letter. Insert an Atari DOS formatted disk. Press RETURN when ready.

Cassette: Insert a blank cassette and rewind. Press the record and play buttons on the recorder. Press RETURN when you are ready.

DISPLAY DESCRIPTIONS AND SPECIAL NOTES

Special Notes:

Map Scroll:

The game map is larger than one screen. To scroll around the map insert a joystick into port #1 and use it to scroll in the direction of your choice. The program also automatically scrolls the map at appropriate times during game play.

Movement:

At the beginning of the movement phase a red cursor will appear on the screen. You may move this cursor by pressing the numbers 1-6, to move or examine a unit of your army place the cursor over the unit and press the space bar. You may now move the unit as you did the cursor (if that unit is eligible to move). Pressing the "F" key will finish that unit's movement for now (you may return to it later). The "E" key ends the movement phase for your entire army. Placing the cursor over any ocean hex and pressing the space bar, will bring up the next unit available to be brought onto the beaches. If no unit appears, keep the space bar depressed until one does appear. Note that only units who are eligible to be brought onto the beaches will appear (if you have few amphib. points available, none may appear). Pressing the "S" key while the cursor is on an ocean hex will skip five of the remaining units waiting to be brought onto the beaches. If you decide not to move the unit onto the beaches press "F". The order of units is the same as on the Order of Battle. If you scroll the map the cursor may no longer appear on the screen. Simply move the cursor back onto the screen by pressing the appropriate keys.

DISPLAY DESCRIPTIONS

Movement:

US 82 AIRB DIV MOVEMENT PHASE COMBAT: 65 LEADER: 5 FATIGUE: 4 **SUPPLIED** EFF: .72 *MP LEFT: 10* TERRAIN: RIVER

The above display tells you that the 82nd airborne division currently has a combat strength of 65 points. Its leader is rated a 5 (out of 9), its fatigue is rated a 4 (out of 9), and its supply state is "supplied". The display also shows that the

unit has an effective strength of .72 of its current combat strength due to leader, fatigue, and supply modifications. It shows that the unit is in river terrain and has 10 movement points left for that phase.

Combat:

GE 706 WEHR REG **COMBAT PHASE** FATIGUE: 0 COMBAT: 40 LEADER: 5 SUPPLIED EFF: 1.0 (2.5) DO YOU WISH TO ATTACK THIS GERMAN UNIT? Y/N

The display above gives the same information as the movement display except for the number in parenthesis which is the overall effective strength of this unit with all factors taken into account, including leadership, fatigue, supply state, and terrain of current position.

D: GE 275 WEHR DIV CP: -14 FT: -2 CP: -7 FT: -4 1: US 2 CAV REG 2: US 2 RNGR BATT CP: -8 FT: -4

The display above is shown after combat is joined by both sides. It shows how many CPs each unit in the battle has lost and also the fatigue points which will be added to it. The defender is indicated with a "D" preceding its name. The attacking unit(s) are identified by numbers.

ATTACK LEVEL 9 VS DEFENSE LEVEL 4 BATTLE ODDS: 1.21 ATTACKER LOST: 15 DEFENDER LOST: 14 AIR/NAVEL: (0)

The display above shows the total results of the battle. The air/naval number, if positive indicates the number of CPs lost of the total losses due to bombardment for the German defender. If the number is negative, it indicates the number of CPs reduced from the original losses of the Allied defender.

NOTE: The number you input in the opening program for display delay governs how long these displays remain on the screen.

UNIT ROSTER (For All Versions)

ALLIED ORDER OF BATTLE

COMBAT COMBAT DATE OF ENTRY/ **UNIT NAME** POINTS CEILING **ENTRY HEX** AT START US UTAH BEACH BATT 20 25 US OMAHA BEACH BATT 20 25 AT START BR GOLD BEACH BATT AT START 20 25 BR JUNO BEACH BATT 20 25 AT START BR SWORD BEACH BATT 20 25 AT START US 1 DEPOT BATT 20 25 AT START /13 US 2 DEPOT BATT AT START /13 20 25 US 3 DEPOT BATT 20 AT START /13 US 4 DEPOT BATT 20 25 AT START /13 BR 5 DEPOT BATT 25 AT START /14 20 BR 6 DEPOT BATT 20 25 AT START /14 US 82 AIRB DIV 60 65 AT START US 101 AIRB DIV 60 AT START 65 **BR 6 AIRB DIV** 55 55 AT START AT START /13 85 US 1 INF DIV 75 US 4 INF DIV 65 75 AT START /13 US 29 INF DIV 65 75 AT START /13 BR 3 INF DIV 75 85 AT START /14 BR 50 INF DIV 75 85 AT START /14 AT START /14 75 CN 3 INF DIV 85 US 2 RNGR BATT 30 35 AT START /13 BR 1 CMDO BRIG 45 45 AT START /14 AT START /14 BR 4 CMDO BRIG 45 45 BR 8 ARM BRIG 45 45 AT START /14 AT START /14 BR 27 ARM BRIG 45 45 CN 2 ARM BRIG 45 45 AT START /14 US 102 CAV REG 35 35 AT START /13 BR 51 INF DIV 80 85 AT START /14 BR 7 ARM DIV 90 95 AT START /14 AT START/14 BR 4 ARM BRIG 45 45 US 2 INF DIV 85 AT START /13 75 75 AT START /13 US 90 INF DIV 65 US 2 ARM DIV 90 95 AT START /13 AT START /13 US 4 CAV REG 35 35 AT START /13 US 9 INF DIV 75 85 85 AT START /14 BR 49 INF DIV 75 AT START/14 90 95 BR 11 ARM DIV US 6 CAV REG 35 35 AT START /13 US 79 INF DIV 65 75 AT START /13 AT START /14 BR 15 INF DIV 75 85 US 30 INF DIV 75 AT START /13 65 AT START /13 US 83 INF DIV 65 75 US 2 CAV REG 35 35 AT START /13 AT START /13 US 3 ARM DIV 90

GERMAN ORDER OF BATTLE

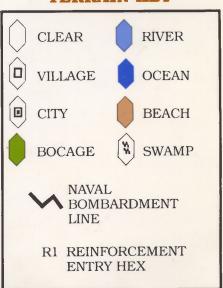
UNIT NAME	COMBAT POINTS	COMBAT CEILING	DATE OF ENTRY/ ENTRY HEX
GE 736 WEHR REG	45	45	AT START
GE 726 WEHR REG	45	45	AT START
GE 706 WEHR REG	45	45	AT START
GE 914 WEHR REG	50	45	AT START
GE 915 WEHR REG	50	45	AT START
GE 916 WEHR REG	40	45	AT START
GE 711 WEHR DIV	60	65	AT START
GE 729 WEHR REG	40	45	AT START
GE 739 WEHR REG	40	45	AT START
GE 919 WEHR REG	40	45	AT START
GE 91 FJ DIV	50	55	AT START
GE 243 WEHR DIV	60	65	AT START
GE 6 FJ REG	45	45	AT START
GE 30 WEHR BRIG	45	45	AT START
GE 21 PZ DIV	95	95	AT START
GE 346 WEHR DIV	60	65	JUNE 6/12
GE 12SS PZ DIV	95	95	JUNE 6/9
GE LEHR PZ DIV	95	95	JUNE 8/7
GE 77 WEHR DIV	55	65	JUNE 8/1
GE 17SS PZGR DIV	65	75	JUNE 10/3
GE 275 WEHR DIV	45	55	JUNE 10/4
GE 2 PZ DIV	90	95	JUNE 10/12
GE 265 WEHR DIV	45	55	JUNE 10/8
GE 266 WEHR DIV	45	55	JUNE 10/2
GE 3 FJ DIV	70	75	JUNE 12/5
GE 2 ASG BRIG	45	55	JUNE 12/7
GE 353 WEHR DIV	70	75	JUNE 16/3
GE 2SS PZ DIV	95	95	JUNE 20/3
GE 16 FJ DIV	65	75	JUNE 24/12
GE 1SS PZ DIV	95	95	JUNE 24/11
GE 276 WEHR DIV	55	65	JUNE 24/7
GE 9SS PZ DIV	95	95	JUNE 26/6
GE 10SS PZ DIV	95	95	JUNE 26/8

ATARI MAP DISPLAY



Cherbourg 10 W. 2 2 0 •

TERRAIN KEY



BAITLE FOR NORMANDY

PLAYER AID CARD — TRS-80

LOADING AND SAVING A GAME

Loading:

Place the second side of the cassette into your recorder, rewind, and press the PLAY button. Type "CLOAD" into your computer and then press ENTER. The program will now begin to load. When READY appears type RUN. When you have finished answering the questions in the opening program keep the play button depressed on the recorder and the computer will load in the main program. When READY appears type RUN and keep the PLAY button depressed so that the computer will load in the data. The first program should load in about 3 minutes and the second should take about 5 minutes. The data will be read in about 3 minutes. Total time will be about 11 to 12 minutes to load on 500 baud. Model III owners should be sure to set low baud on

their computers before loading. If you have a bad load check your volume (volume 6 is good) and your recorder head. If you scroll the screen at any time you will have to start again and load in the opening program.

Saving a Game:

When the program asks the question if you wish to save the game, place a blank cassette into the recorder, press the PLAY and RECORD buttons, and press "Y" on the keyboard.

Loading a Saved Game:

Follow the above instructions for loading except when ready for the data to be read in, insert the cassette with your saved game on it.

DISPLAY DESCRIPTIONS

Movement:

US 82 AIRB DIV COMBAT: 65 LEADER: 5 FATIGUE: 4 MOVEMENT PHASE SUPPLY STATE: SUPPLIED EFF: .72 TERRAIN: RIVER *MP LEFT: 10*

The above display tells you that the 82nd airborne division currently has a combat strength of 65 points. Its leader is rated a 5 (out of 9), its fatigue is rated a 4 (out of 9), and its supply state is "supplied". The display also shows that the units has an effective strength of .72 of its current combat strength due to leader, fatigue, and supply modifications. It shows that the unit is in river terrain and has 10 movement points left for that phase. The numbers at the right are a compass to indicate desired direction of movement.

Combat:

GE 706 WEHR REG COMBAT: 40 LEADER:5 FATIGUE:0 COMBAT PHASE SUPPLY STATE: SUPPLIED EFF: 1.0 (2.5) DO YOU WISH TO ATTACK THIS GERMAN UNIT? Y/N

The display above gives the same information as the movement display except for the number in parenthesis which is the overall effective strength of this unit with all factors taken into account, including leadership, fatigue, supply state, and terrain of current position.

D: GE 275 WEHR DIV * LOST 14 CP - FATIGUE 2 * 1: US 2 CAV REG * LOST 7 CP - FATIGUE 4 * 2: US 2 RNGR BATT * LOST 8 CP - FATIGUE 4 *

The display above is shown after combat is joined by both

sides. It shows how many CPs each unit in the battle has lost and also the fatigue points which will be added to it. The defender is indicated with a "D" preceding its name. The attacking unit(s) are identified by numbers. The "D" and numbers also appear on the map to mark their current positions.

ATTACK LEVEL 9 VS DEFENSE LEVEL 4 BATTLES ODDS: 1.21 ATTACKER LOST: 15 DEFENDER LOST: 14 AIR/NAVAL: (0)

The display above shows the total results of the battle. The air/naval number, if positive indicates the number of CPs lost of the total losses due to bombardment for the German defender. If the number is negative, it indicates the number of CPs reduced from the original losses of the Allied defender.

NOTE: The number you input in the opening program for display delay governs how long these displays remain on the screen. To freeze the display you can always press shift and the @ key on your computer and then press any key to continue.



TRS-80 MAP DISPLAY

